arrangement of expansions of first and second level cavities **125** and **225** may be used. In this variation, as mentioned above, the second level of deformation preferably varies from the first level of deformation in both height and width. In the variation as shown in FIGS. **7***b* and **7***c*, the total width of the second stage of deformation of the particular region **113***a* spans the distance between the two second level cavities **225** while the first stage of deformation of the particular region **113** is of a width substantially similar to the width of each first level cavity **125**. However, the first and second stages of deformation of the particular region **113** in this variation may differ in any other suitable way. In a second example, as shown in FIG. **8**, the user interface system may include a second layer **210** that functions to define a second surface **215** and to partially define an additional second level cavity **225**. The second surface **215** is preferably substantially adjacent to the surface **115**, and preferably substantially planar to the surface **115**, but may alternatively be of any suitable arrangement relative to the surface **115**. The additional second level cavity **225** may function to deform a second particular region **213** on the second surface **215**. This arrangement provides the user interface system **100** with a particular region **113** capable of two stages of deformation and a second particular region **213** capable of one stage of deformation. Similarly, additional variation in deformation of the particular region **113** and the second particular region **213** may be achieved by varying the volume of fluid displaced to the cavities by the displacement device **130**.

[0031] The user interface system **100** is preferably one of the embodiments and variations as described above. However, the user interface system **100** may be a combination of any of the above embodiments and variations. For example, as shown in FIG. **9**, the first and second embodiments may be combined. In the central portion of the sheet **102**, the first and second fluid vessels **127** and **227** may cooperate to deform a particular region **113** into a first and second stage. In the left and right regions of the sheet **102**, the first and second fluid vessels **127** and **227** may cooperate to increase the density of the deformable particular regions **113** of the surface. However, any other suitable combination of the above embodiments and variations as described above may be used. Similarly, any other suitable arrangement of a first level fluid vessel **127** located at a first level within the sheet **102** and a second level fluid vessel **227** located at a second level within the sheet **102** may be used.

[0032] As a person skilled in the art will recognize from the previous detailed description and from the figures and claims, modifications and changes can be made to the preferred embodiments of the invention without departing from the scope of this invention defined in the following claims.

We claim:

1. A user interface system comprising:

a sheet that defines a surface and at least partially defines a first level fluid vessel arranged at a first level within the sheet and a second level fluid vessel arranged at a second level within the sheet, wherein both the first and second level fluid vessels are arranged underneath the surface;

a first volume of fluid contained within the first level fluid vessel;

a second volume of fluid contained within the second level fluid vessel; and

a displacement device coupled to the first and second level fluid vessels that selectively manipulates the first and second volumes of fluid, thereby deforming a particular region of the surface to a first and second stage, respectively.

2. The user interface system of claim **1**, wherein the sheet includes a substrate that at least partially defines the first and second fluid vessels and a layer arranged above the substrate that defines the surface.

3. The user interface system of claim **2**, further comprising a support structure arranged below the layer that supports the layer and substantially prevents inward deformation of the particular region of the surface.

4. The user interface system of claim **1**, wherein a portion of each of the first and second level fluid vessels are arranged along substantially the same plane within the sheet.

5. The user interface system of claim **1**, wherein the sheet includes a first substrate that at least partially defines the first fluid vessel and a second substrate that at least partially defines the second fluid vessel and a layer that defines the surface arranged above the first and second substrates.

6. The user interface system of claim **5**, wherein the second substrate is arranged underneath the first substrate.

7. The user interface system of claim **5**, further comprising a second layer that is arranged in between the first and second substrates.

8. The user interface system of claim **1**, wherein the displacement device includes a first displacement device that manipulates the fluid in the first fluid vessel and a second displacement device that manipulates the fluid in the second fluid vessel.

9. The user interface system of claim **1**, further comprising a valve that directs fluid within the first and second fluid vessels that cooperates with the displacement device to manipulate the fluid within the first and second fluid vessels.

10. The user interface system of claim **1**, wherein the displacement device manipulates the first volume of fluid to expand at least a portion the first level fluid vessel to deform a particular region of the surface to a first stage, and manipulates the second volume of fluid to expand at least a portion of the second level fluid vessel to deform a particular region of the surface to a second stage.

11. The user interface system of claim **10**, wherein the portion of the second level fluid vessel that expands is arranged substantially directly underneath the portion of the first level fluid vessel that expands.

12. The user interface system of claim **11**, wherein the expandable portion of the first level fluid vessel expands to deform the particular region to the first stage and wherein the expandable portion of the second fluid vessel expands to deform the first level fluid vessel and to substantially increase the height of the deformed particular region to the second stage.

13. The user interface system of claim **12**, wherein the material of the sheet arranged in between the expandable portions of the first and second level fluid vessels is less pliable than the material of the sheet arranged above the expandable portion of the first level fluid vessel.

14. The user interface system of claim **11**, wherein the expandable portion of the first level fluid vessel expands to deform a first portion of the particular region to deform the particular region to the first stage and wherein the expandable portion of the second fluid vessel expands to deform a larger portion of the particular region of the surface to substantially increase the area of the deformed particular region of the surface to the second stage.